Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Harmful Algal Bloom Monitoring Data for Puget Sound - SoundToxins: Partnership for Enhanced Monitoring and Emergency Response to Harmful Algal Blooms in Puget Sound

1.2. Summary description of the data:

Toxic outbreaks of species of the dinoflagellate Alexandrium have become pervasive in the Puget Sound region over the last two decades, escalating the threats to human health, but a newer algal threat from the toxigenic diatom, Pseudo-nitzschia, appears poised to repeat this toxic invasion. Increasing anthropogenic influences have been suggested to facilitate and exacerbate these harmful algal blooms (HABs), but there is preliminary evidence that advection of seed blooms from outside Puget Sound instead may be responsible for some of these toxic outbreaks. Attaining a predictive capability for these bloom events in Puget Sound and identifying steps to mitigate their effects depends on quickly gaining an understanding of the conditions that promote bloom initiation, maintenance, and transport. The existing monitoring and management program for paralytic shellfish toxins in Puget Sound is not designed for, or capable of monitoring these increasing alternate HAB outbreaks, nor can it ascertain what steps might be taken to potentially limit the spread of these alternate HABs throughout Puget Sound, as occurred with Alexandrium. To better attain these goals, the Partnership for Enhanced Monitoring and Emergency Response to Harmful Algal Blooms in Puget Sound (SoundToxins) is proposed as a regional forum for collaboration and cooperation among federal, state and local agencies, coastal tribes, marine resource-based businesses, public interest groups, and academic institutions to manage the prediction of and response to the above HAB species and Vibrio species in Puget Sound using a practical blend of emerging and proven technologies. The project objectives are as follows: 1. Identify logistically-feasible and management-relevant sentinel sampling sites for studying the early onset and establishment of toxic HABs. 2. Identify the subset of environmental conditions that promote the onset & flourishing of HABs. 3. Determine whether HABs initiate in Puget Sound or develop from seed populations advected into the Sound from the ocean or British Columbia.

Dataset contains oceanographic data (e.g. Temperature, Salinity, Chlorophyll), nutrient concentrations, marine toxin data, relative abundances, and cell counts of harmful algal

species such as Pseudo-nitzschia, Alexandrium, Heterosigma, and Dinophysis for various locations in Puget Sound.

1.3. Is this a one-time data collection, or an ongoing series of measurements?
Ongoing series of measurements

1.4. Actual or planned temporal coverage of the data:
2015-01-01 to Present

1.5. Actual or planned geographic coverage of the data:
W: -122.5457, E: -122.5457, N: 47.5734, S: 47.5733
Clam Bay: Clam Bay, WA

W: -122.7515, E: -122.7515, N: 48.1147, S: 48.1147
Port Townsend: Port Townsend, WA

W: -122.4543, E: -122.4543, N: 47.3727, S: 47.3727
Quartermaster Harbor: Quartermaster Harbor, WA

W: -125.3893, E: -119.9604, N: 50.5101, S: 47.0437
Salish Sea: Salish Sea

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Table (digital)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)
Instrument: Unknown Instrument
Platform: Platform Not Applicable
Physical Collection / Fishing Gear: Water Sampler Bottle - Niskin Bottle

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
Metadata Contact

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
Northwest Fisheries Science Center

2.4. E-mail address:
nmfs.nwfsc.metadata@noaa.gov

2.5. Phone number:
(206) 860-3433

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:
Brian D Bill

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?
No

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):
10%

5. Data Lineage and Quality
NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible
(describe or provide URL of description):
Lineage Statement:
None

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):
None

6. Data Documentation
The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented,

specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

6.1.1. If metadata are non-existent or non-compliant, please explain:

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://inport.nmfs.noaa.gov/inport/item/17796

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

Northwest Fisheries Science Center

7.2.1. If data hosting service is needed, please indicate:

No

7.2.2. URL of data access service, if known:
http://soundtoxins.org

7.3. Data access methods or services offered:
User account

7.4. Approximate delay between data collection and dissemination:
14 days

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:
No Delay

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)
To Be Determined

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:
NA

8.2. Data storage facility prior to being sent to an archive facility (if any):
Northwest Fisheries Science Center - Seattle, WA

8.3. Approximate delay between data collection and submission to an archive facility:
365 days

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection
The Northwest Fisheries Science Center facilitates backup and recovery of all data and IT components which are managed by IT Operations through the capture of static (point-in-time) backup data to physical media. Once data is captured to physical media (every 1-3 days), a duplicate is made and routinely (weekly) transported to an offsite archive facility where it is maintained throughout the data's applicable life-cycle.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.